

المؤتمر الواحد و الأربعمون للمنظمة العربية  
للمسؤولين عن القبول والتسجيل في الجامعات بالدول العربية  
بعنوان: دور الذكاء الاصطناعي في تعزيز عمليات القبول والتسجيل

# PEDAGOGICAL ADAPTATIONS FOR HEARING- IMPAIRED STUDENTS

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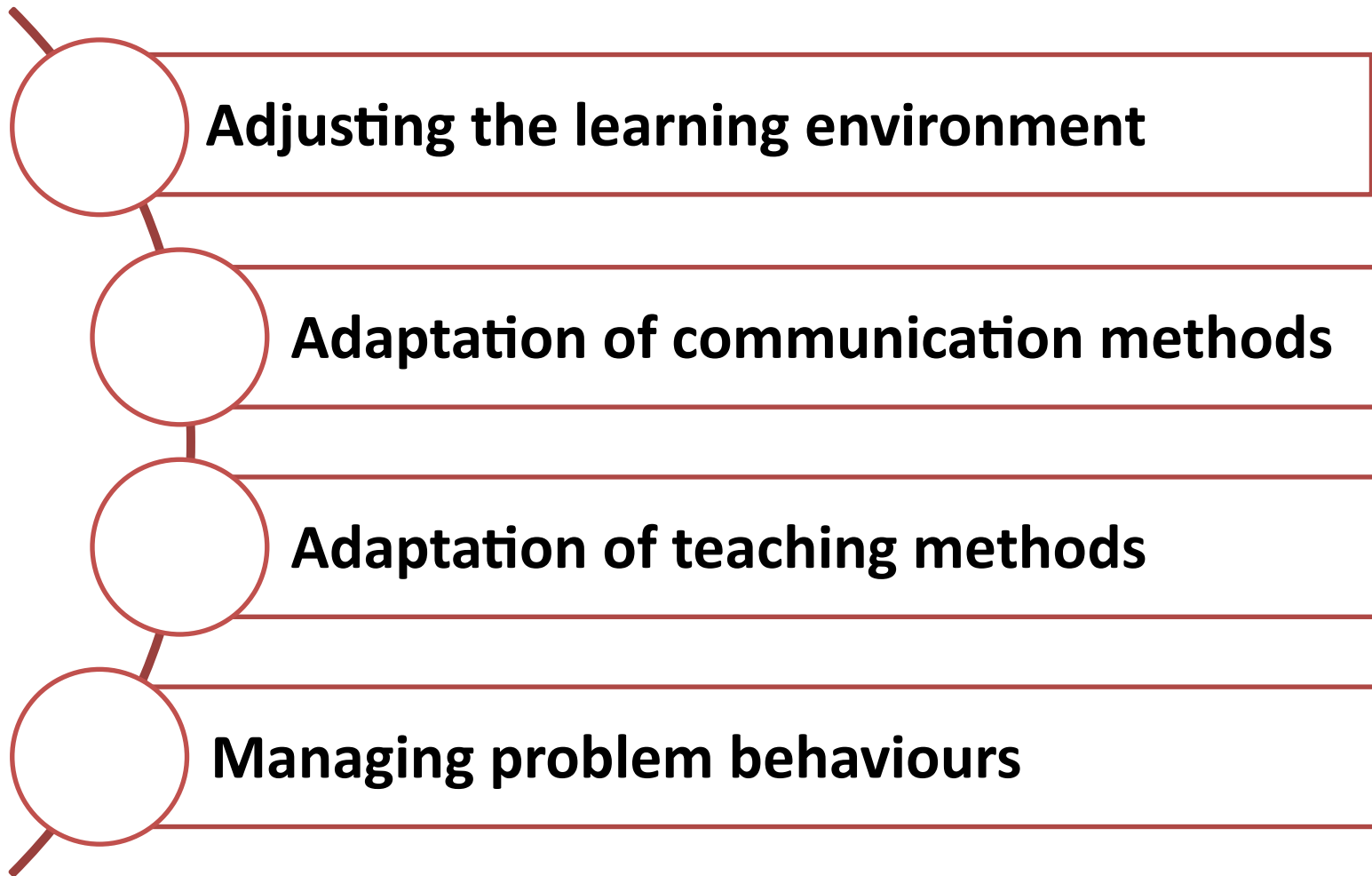
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# INTRODUCTION



- The importance of an inclusive approach for equal opportunities
- The importance of raising awareness among teaching and administrative staff for an inclusive and **empowering environment**
- Technological advancements and evolving needs





## Adjusting the learning environment

# Receiving students with hearing impairments

- The importance of identifying needs and preferred communication
- The compensation provided to students differs depending on the type and degree of their hearing loss, the language used, and their personality traits.
- The need for written communication

# Suggestions to enhance the classroom environment

- Acoustic treatment
- Ensuring accessible furniture
- Technological solutions: E.g. electronic pens
- Enhancing security for balance disorders: vertical circulation and safety

# Good classroom practices

## Strategies for seating arrangements:

- Allow the hearing-impaired student to sit in the 2nd or 3rd row, **if they wish**.
- Strategically position student for lip reading and class participation.
- **To communicate with deaf students, always approach them from the front to avoid startling them.**

# Good classroom practices

## Importance of transcribing verbal information into written form

- **Warning:** Seemingly trivial information can be of great significance to the deaf student. Therefore, it is essential not to judge the relevance of any information on one's own.



# Emergency safety measures



## In emergencies e.g. a fire alarm:

- Importance of early emergency alerts for efficient evacuation
- Use of light flashes and vibrating bracelets to effectively transmit the emergency information for deaf students.

# Pitfalls to avoid!

## Exclusion of hearing-impaired students for fear of inconvenience and lack of knowledge.

- Feelings such as fear of doing something wrong, demotivation, shyness, or inertia can prevent effective communication.
- **Result:** isolation of deaf and hard-of-hearing students!!!
- **Solution:** The most effective approach to defuse these feelings is to adopt a caring and non-infantilizing attitude and to communicate through writing.

# Pitfalls to avoid!

## Avoiding Infantilization

- **Over-articulation:** distorts the lip image of words, making them difficult to recognize.
  - Speak at a normal pace, not too fast or too slow.
- **Loud speaking:** a deaf person will not hear what is said and a hearing-impaired person may find the amplified sound to be annoying or even painful.
  - Ensure clear mouth visibility for accurate lip reading



## Adaptation of communication methods

# Communication tips



## Refrain from relying on auditory cues

- The preferred senses for receiving information are sight and touch. **E.g. turning the room light on and off, vibrations through different surfaces attention.**

## Avoid interruptions

- Instead, everyone should take turns speaking and raise their hand to indicate their desire to speak.
- The teacher can also point to the person who is speaking

## Identify students' needs and preferred modes of communication.

# TO AVOID:

- Idiomatic expressions: e.g. “to get the boot!” (be dismissed from one's job).
- Double meanings: e.g. Ironically saying, “Bravo!” to someone who makes a mistake.

## TO DO:

- Ensure that the student is paying attention before giving instructions.
- Give one instruction at a time and repeating it if necessary.
- Use short sentences, simple, concrete, and repetitive language, and speaking at a slow pace.
- Use affirmative and active sentences.
- Allow for a latency period.
- Encourage the student to participate in group instructions.

# Graphics

## Ensure sufficient contrast between the colour of the text and that of the background:

- The minimum contrast ratio between two colours must always be 70%.
- For optimal legibility, black text on a white background is recommended.
- Avoid capital letters, underlining, and italics for sentences. Use bold text only for emphasis.



# Audiovisual content

**Provide a text alternative to any audio content, whether video or audio files:**

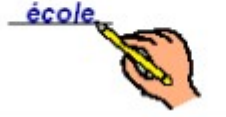
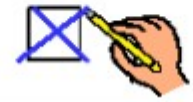




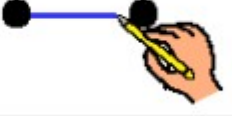
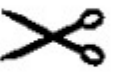
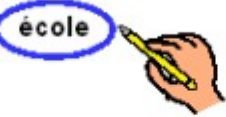


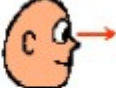


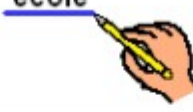

- **If the soundtrack is pre-recorded, subtitling the content is a good option;**
- If it is recorded and subtitling is not possible, an accurate transcription of the speech on paper should be provided;
- Add a video with Sign Language translation to multimedia content.

# Web and interfaces

- **Google Drive** is a collaborative tool that allows real-time sharing and editing of text files;
- **Moodle** enables students to access courses, questionnaires, and exercises created by their teachers. It also allows them to answer directly online.
- Some **video MOOCs are provided with subtitling and text transcription.**



# Use of visual aids to facilitate understanding of instructions

<p>écris</p> 	<p>coche</p> 	<p>recopie</p> 	<p>compte</p> 
<p>complète</p> 	<p>colorie</p> 	<p>relie</p> 	<p>découpe</p> 
<p>entoure</p> 	<p>dessine</p> 	<p>repassse</p> 	<p>regarde</p> 
<p>barre</p> 	<p>colle</p> 	<p>souligne</p> 	<p>écoute</p> 



## Adaptation of teaching methods

# Choice of lessons

- Planning an adapted course schedule
- Suggesting a system for students to complete courses in a longer time without affecting their grades.
- The first incomplete year will be recorded on the transcript without any mention of failure.

# Teaching tutorial sessions

## Provision of teaching tutorial sessions:

- In one or more discipline
- Provided either by teachers or students enrolled in the same training program
- The sessions are limited to x hours per year

# Make courses accessible

## Send lessons at least one week in advance to:

- Give hearing-impaired students time to read and absorb the material.
- Allow students to focus on the teacher's speech for lip-reading.
- Help students retain information more effectively and use less energy to complete the course.

# Consistent help and assistance

- Note-taking during lectures followed by transcription,
- Customized explanations for students,
- Assistance in sign language,
- Help with proofreading academic work and dissertations.



# Assistive technologies

- Video interpretation in SL, capsules in SL, subtitling
- Voice amplification (FM system)
- Magnetic loop

# Assessment of hearing impaired students

- **Oral assessment** may require an interpreter or communication interface.
- Assistive technologies can be used for students with mild to moderate hearing loss.
- Consider students' **mastery of written language** and use of strategies like multiple-choice questions.
- Communicate important oral information conveyed during the exam in writing.



## Managing problem behaviors

# Supporting the student

## A collaborative reflection process with the student to identify strategies and compensations

- Example: referring the student to a speech therapist
- Example: providing practical assistance with academic tasks

# The paramount factors that determine success in any educational setting

- Active listening (verbal and non-verbal),
- Providing encouragements,
- Using positive teaching methods,
- Demonstrating respect for each student as an individual, both in terms of their academic abilities and personal identity,
- Avoiding judgmental attitudes,
- Creativity to come up ideas for arrangements and compensation strategies.

# Conclusion

- Inform the student about available services;
- Suggest measures that address the student's specific needs;
- Offer personalized follow-up to the student as needed;
- Raise awareness among university staff.;
- Encourage collaboration among teachers to implement **accommodation** measures;
- Develop an intervention plan.

# Indeed...

According to the Montreal Commission, educational institutions should take practical steps to accommodate these students, and be proactive and innovative in their approach. If they fail to do so, they must demonstrate that their attempts have been unsuccessful, and that any other alternative solution would be an unreasonable burden on them.

[http://www.cdpedj.qc.ca/Publications/accommodement\\_handicap\\_collegial.pdf](http://www.cdpedj.qc.ca/Publications/accommodement_handicap_collegial.pdf)

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# THANK YOU FOR YOUR ATTENTION

